

GILA RIVER BASIN

09485550 ARCADIA WASH AT TUCSON, AZ

LOCATION.--Lat 32°14'37", long 110°53'05", in SE¹/₄NW¹/₄ sec.2, T.14 S., R.14 E., Pima County, Hydrologic Unit 15050302, on right bank 150 ft downstream from Pima Street in Tucson.

DRAINAGE AREA.--2.72 mi².

PERIOD OF RECORD.--October 1975 to September 1983 (Publication by U.S. Geological Survey discontinued; records available from cooperator listed below).

GAGE.--Water-stage recorder and concrete flume. Altitude of gage is 2,485 ft, from topographic map.

REMARKS.--Entire drainage basin is an urban, residential area.

COOPERATION.--Records furnished by Water Resources Research Center, University of Arizona.

AVERAGE DISCHARGE.--8 years, 0.36 ft³/s, 261 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 836 ft³/s, Sept. 11, 1982, gage height, 5.36 ft; no flow most of each year.

Annual peak discharge

Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes	Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes
1966	07-19-66	658	HP,C	1976	09-25-76	342	C
1968	08-19-68	310	C	1977	09-10-77	220	C
1969	08-05-69	265	C	1978	09-21-78	661	C
1970	08-11-70	594	C	1979	08-12-79	647	C
1971	08-17-71	¹ 1,210	C	1980	08-13-80	595	C
1972	08-12-72	940	C	1981	06-25-81	330	C
1973	07-07-73	121	C	1982	09-11-82	836	C
1974	07-18-74	264	C	1983	11-30-83	157	C
1975	07-16-75	134	C				

¹Highest since 1963.

Magnitude and probability of instantaneous peak flow based on period of record 1966, 1968-83

Discharge, in ft ³ /s, for indicated recurrence interval in years, and exceedance probability, in percent					
2	5	10	25	50†	100†
50%	20%	10%	4%	2%	1%
395	707	953	1,310	1,600	1,920
Weighted skew	(logs) =	-0.07			
Mean	(logs) =	2.59			
Standard dev.	(logs) =	0.30			

† Reliability of values in column is uncertain, and potential errors are large.

Basin characteristics

Main channel slope (ft/mi)	Stream length (mi)	Mean basin elevation (ft)	Forested area (percent)	Soil index	Mean annual precipitation (in)	Rainfall intensity, 24-hour	
						2-year (in)	50-year (in)
0.77	5.54	2,560	0.0	1.0	11.0	1.7	4.2

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